

*CLAIM AMENDMENTS*

1. (Currently Amended) A cleaning composition for removing resists, comprising a salt of hydrofluoric acid and a base not containing a metal (A component), a water-soluble organic solvent (B1 component), at least one acid selected from ~~a~~ the group consisting of organic ~~acid acids~~ and inorganic ~~acid acids~~ (C component), and water (D component), and having ~~hydrogen ion concentration (pH)~~ a pH of 4-8.

2. (Currently Amended) A cleaning composition for removing resists, comprising a salt of hydrofluoric acid and a base not containing a metal (A component), a water-soluble organic solvent (B1 component), at least one acid selected from ~~a~~ the group consisting of organic ~~acid acids~~ and inorganic ~~acid acids~~ (C component), water (D component), and an ammonium salt (E1 component), and having ~~hydrogen ion concentration (pH)~~ a pH of 4-8.

3. (Currently Amended) The cleaning composition for removing resists according to claim 1, wherein the water-soluble organic solvent (the B1 component) is a mixture of amides and polyhydric alcohol or its ~~derivative~~ derivatives.

4. (Currently Amended) The cleaning composition for removing resists according to claim 1, wherein the base not containing a metal for forming the salt of hydrofluoric acid and a base not containing a metal (the A component) is at least one base selected from ~~a~~ the group consisting of an organic amine compound, ammonia, and a lower quaternary ammonium base.

5. (Original) The cleaning composition for removing resists according to claim 1, wherein the content of the salt of hydrofluoric acid and a base not containing a metal (the A component) is 0.01-1 mass %.

6. (Currently Amended) A cleaning composition for removing resists, comprising a salt of hydrofluoric acid and a base not containing a metal (A component), a water-soluble organic solvent (B2 component), phosphonic acid (C1 component), water (D component), and a base not containing a metal (E component), and having ~~hydrogen ion concentration (pH)~~ a pH of 2-8.

7. (Currently Amended) The cleaning composition for removing resists according to claim 6, wherein the water-soluble organic solvent (the B2 component) is a mixture of a sulfur-containing compound and polyhydric alcohol or its ~~derivative~~ derivative.

8. (Currently Amended) A cleaning composition for removing resists, comprising a salt of hydrofluoric acid and a base not containing a metal (A component), a water-soluble organic solvent (B2 component), phosphonic acid (C1 component), water (D component), a base not containing a metal (E component), and a Cu corrosion inhibitor (F component), and having ~~hydrogen ion concentration (pH)~~ a pH of 2-8.

9. (Currently Amended) The cleaning composition for removing resists according to claim 8, wherein the Cu corrosion inhibitor (the F component) includes at least one ~~kind~~ selected from ~~a~~ the group consisting of triazoles, aliphatic carboxylic acids, aromatic carboxylic acids, and amino carboxylic acids.

10. (Currently Amended) A ~~manufacturing~~ method of manufacturing a semiconductor device, comprising ~~the steps of:~~

forming a metal film having copper as its main component on a semiconductor substrate;

forming an insulating film ~~thereon~~ on the metal film;

forming a resist film ~~further thereon~~ on the insulating film;

~~providing~~ forming a hole or a trench in the insulating film by dry etching, using the resist film as a mask;

removing the resist by gas plasma processing or heat treatment; and

removing remaining resist residue using the cleaning composition for removing resists according to claim 1.

11. (Currently Amended) The ~~manufacturing method of a semiconductor device~~ according to claim 10, wherein the resist film used as the mask in ~~said~~ the dry etching is a chemically amplified excimer resist.

12. (Currently Amended) A ~~manufacturing~~ method of manufacturing a semiconductor device, comprising ~~the steps of:~~

forming a metal film having copper as its main component on a semiconductor substrate;

forming an insulating film ~~thereon~~ on the metal film;

forming a resist film ~~further thereon~~ on the insulating film;

~~providing~~ forming a hole or a trench in the insulating film by dry etching, using the resist film as a mask; and

removing the ~~remaining~~ resist film and resist residue produced during the dry etching using the cleaning composition for removing resists according to claim 1.

13. (Currently Amended) A ~~manufacturing~~ method of ~~manufacturing~~ a semiconductor device, comprising ~~the steps of~~:

- forming a metal film having copper as its main component on a semiconductor substrate;
- forming an insulating film ~~thereon~~ on the metal film;
- ~~providing~~ forming a hole in the insulating film reaching the metal film by dry etching;

and

- removing etching residue produced during the dry etching using the cleaning composition for removing resists according to claim 1.